compilers will be readily met with and corrected under the earnest eye of the competent student, who will be too thankful for the aid given him in cultivating his special field to find fault with the few weeds and stones left on its ready-prepared surface.

MISCELLANEOUS.

On the Origin and Distribution of the Turbellaria of the deep Fauna of the Lake of Geneva. By M. Duplessis.

It appears from the author's researches that all the species of Turbellaria from the bottom of the Lake of Geneva are also found (with the exception of two very remarkable species, which are at the same time the types of new genera) either in the stagnant waters of the shores, or in those of the marshes or small lakes of other parts of the canton. Nevertheless two reservations must be made in this respect: the first is, that many species which are met with in the stagnant waters of the country are not to be found in the mud of the deep waters; the second is, that the greater number of species which live also at a great depth have undergone some easily appreciable modifications.

Speaking first of the Dendrocœlous Turbellaria or Planarians, the author describes the modifications which are observed in *Dendrocœlum lacteum* and *fuscum* on comparing the individuals of the shores with those which inhabit the depths of the lake. The specimens coming from great depths are generally smaller and lighter in colour, and are further distinguished by the rosy colour of the digestive tube. The visual organ tends to become atrophied; one of these varieties of *D. lacteum* is remarkable for the division of each oculiform point into two smaller parts, and has been described by M. Gräff under the name of *Planaria quadrioculata*.

Other species, such as *Planaria gonocephala*, so common in the rivulets of the Jorat, never descend so far as the lake; and it is the same with the numerous representatives of the genus *Polycelis*.

Usually the *Planariæ* of the deep fauna appear to have emigrated from the waters of the shores; but this group is represented at the bottom of the lake by a smaller number of species.

Some very similar facts strike us in the distribution of the Rhabdocœla. *Typhloplana viridis* and *T. subfusca*, which occur everywhere in the stagnant waters of the country, are also met with in the depths of the Lake of Geneva, while *T. pellucida* and *T. pallida*, so common in the pools, have not yet been seen in the mud of the lake.

Regarding the Vorticinæ, *Mesostomum Ehrenbergii*, *lingua*, and *pusillum* are found both in the shallows and depths of the lake, while *M. personatum* appears, on the contrary, to be absent in the latter.

A curious type, *Microstomum lineare*, which is met with everywhere on the shores, descends also to the deep waters of the lake; but it there invariably becomes larger, and its intestine of a pale rose-colour similar to that of the *Planariæ*.

Lastly the Rhynchocœles or Nemertians are represented in the deep fauna by *Prostomum lineare* and *Prorhynchus stagnalis*, which are also found, the former in the pools of the shore, the latter in springs and under the stones of rivulets.

These observations are sufficient to show that the deep fauna of the Lake of Geneva has originated, at least as regards the Turbellaria, from the littoral and paludicolous species of the neighbouring regions. Yet (and this is the most remarkable point in this investigation) two species of the deep fauna completely evade this interpretation, owing to the fact that they are not found in the waters of the shores, and that, on the contrary, they resemble Mediterranean types. These two species have been provisionally described under the names of *Vortex lemani* and *Mesostomum morgiense*, and probably belong to new genera. The latter, in particular, is certainly not a true *Mesostomum*, but belongs to a family of Turbellaria hitherto exclusively marine. These two forms, without analogues in the remainder of our fauna, are at the same time those which reach the greatest depth. They have only been found in a few other European lakes—as, for instance, in that of Starnberg, in Bavaria.

The class Turbellaria is not, however, the only one which presents facts of this kind. M. Vernet has found amongst the crustaceans of the deep fauna a form related to the genus *Cythere*, which is, as is well known, exclusively marine. M. Duplessis has himself remarked amongst the Arachnida of the lake two species which bear a striking resemblance to marine types. One is the *Campognatha Forelli*, which so exactly resembles a small *Campognatha* of the Mediterranean shores, that at the first glance one might confound the two species. The other belongs to a singular genus, which also occurs in the mud of the Mediterranean. How can facts of this nature be explained? Perhaps we have here the last remains of a marine population, some types of which have accommodated themselves to fresh water as the sea retreated. This, however, is a mere conjecture; and we all know how circumspectly we must venture upon this ground.—*Bibl. Univ.* Oct. 15, 1877, *Arch. des Sciences*, p. 326.

Characters of a new Species of Dryops *from Formosa* (Coleoptera, Parnidæ). By Charles O. Waterhouse.

The British Museum has recently received a small collection of objects of natural history from the island of Formosa. They were presented by Mr. Matthew Dickson; and among the Coleoptera I find a specimen of the genus *Dryops* which belongs undoubtedly to an undescribed species. I propose to name it

Dryops Dicksoni.

D. elongatus, griseo-flavescens, sericeus; thorace parum convexo, disco medio leviter impresso, angulis posticis divergentibus, acutissimis; elytris striatis.

Long. 4 lin.